



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

February 8, 2016

Mr. Robert Kaplan, Deputy Regional Administrator
United States Environmental Protection Agency, Region 5
77 West Jackson Boulevard, R-19J
Chicago, IL 60604-3507

RE: National Pollutant Discharge Elimination System (NPDES) General Permit
Authorization for Discharges Associated with Coal Surface Affectment
Activities; Ohio EPA ID #: OHM000004

Dear Mr. Kaplan,

The United States Environmental Protection Agency (U.S. EPA) made several comments on the general permit September 15, 2015, and September 30, 2015. Ohio EPA has already responded to comments *e1, e2, e3, e5, e6, g1, g2, g3, h1, h2, i2, k1, k2, and k3* from the September 15th letter, and comments *a, b1, c, and e* from the September 30th letter. This letter contains responses to the remaining unaddressed comments from both letters.

When Ohio EPA staff met with you and U.S. EPA staff on September 2 at U.S. EPA Region 5's Chicago office, a U.S. EPA senior staff repeatedly stated that he and his staff had "solutions" to address the comments. Unfortunately, in a call with Ohio EPA on November 4, staff did not recall making those statements about "solutions". Accordingly, Ohio EPA has considered Region 5 staffs' comments and has addressed the articulated concerns with changes to the permit that we believe are appropriate.

With these changes, the attached permit is our final draft. We will public notice the permit the week of February 8, 2016.

We appreciate your attention in this matter,

Craig W. Butler
Director, Ohio EPA

September 15, 2015 Comments:

Comment a: Reasonable Potential Analysis (RPA) for conductivity – OEPA conducted an RPA to determine if a water quality based effluent limit (WQBEL) for conductivity would be required in the draft permit. OEPA's finding is that no limit is needed. It appears that OEPA's RPA pooled all of the data that was reported over the course of the existing general permit and treated each data point as an individual result. The renewed general permit must include sufficiently stringent limits to prevent all discharges from having the reasonable potential to cause or contribute to an excursion of water quality standards. We looked at the data outfall-by-outfall, and found that the projected effluent quality at 41% of the outfalls demonstrates the reasonable potential to cause or contribute to exceedances of water quality criteria for total dissolved solids (or conductivity as it is translated in Ohio's water quality standards). Given that general permits are required to include the same WQBELs for all sources (40 CFR 122.28(a)(3), 122.44), the permit should contain a WQBEL for conductivity (or TDS) using either the numeric criteria of 1500 mg/L TDS or 2400 μ S/cm conductivity.

Response a: In response to U.S.EPA's finding of 41% of outfalls having the reasonable potential to contribute to exceedances of the water quality standard (WQS), Ohio EPA examined the actual reported data (March 2009 through January 2013) to determine if the projection was accurate. Ohio EPA checked the data in two ways:

a. Total conductivity values over 2400 μ S/cm – all reported values were tallied for a total of 9240 data points. Of those, 954 were greater than or equal to 2400 μ S/cm. Only 10.3% of all reported conductivity values would have exceeded the proposed limit.

b. Total outfalls with conductivity values over 2400 μ S/cm – the 196 permits that were active in the timeframe totaled 1154 outfalls. However, only 554 outfalls had reported conductivity data. Of those, 147 outfalls had at least one value greater than or equal to 2400 μ S/cm. This is 27% of all outfalls with data.

Ohio EPA has determined there is no reasonable potential for the majority of applicable sites to exceed WQS for conductivity (TDS), and therefore, do not need a limit. However, Ohio EPA acknowledges that a small number of individual facilities do have reasonable potential (over 50% of conductivity values greater than or equal to 2400 $\mu\text{S}/\text{cm}$ were concentrated in just nine permits). Ohio EPA proposes to amend the eligibility requirements to perform an RPA for existing facilities. The general permit will have a monitoring table without a TDS limit for permittees who do not show reasonable potential and a monitoring table with a TDS limit of 1500 mg/L for permittees who do show reasonable potential. Precipitation-based alternative monitoring tables will remain the same.

Comment b: **Impaired Waters – Several watersheds in Ohio are listed as impaired, with causes being related to coal mining and/or the pollutants typically discharged by coal mining operations. The draft permit does not contain any language as to how OEPA would evaluate an application for renewed or new coverage that would discharge to an impaired water. The permit cannot authorize discharges that would contribute to an existing impairment (40 122.4(i), 122.44(d)(1)). Discharges to waters that are impaired due to pollutants typically discharged from coal mining operations should be excluded from coverage.**

Response b: Ohio EPA agrees there are several watersheds that are impaired due to pollutants typically discharged from coal mining operations. However, the results of some Total Daily Maximum Load (TMDL) studies in those watersheds recommend remining as a method to reduce impacts from abandoned mine land and acid mine drainage. In this case, remining and new coal mining would most likely improve the water quality in the impaired watershed. Ohio EPA proposes to utilize Part I.B.2.h (Director's determination) to review the existing conditions and determine if a facility may discharge to impaired waters. Proposed dischargers who are located in a watershed listed as impaired for coal related pollutants must demonstrate that the proposed discharge will not result in increased concentrations of pollutants that are incompatible with the restoration of the designated use.

Comment c: **Contents of NOI – OEPA should require each NOI applicant to provide a complete analysis for metals (see**

list below). To date, OEPA does not have information regarding effluent quality from facilities eligible for coverage under the general permit. Applicants are required to characterize their discharge under 40 CFR 122.21(g) and 122.21(k). Requiring each permittee to conduct this monitoring once per permit term will generate a data representative of the discharges and the burden on permittees can be minimized by monitoring once per permit term: Aluminum, Barium, Boron, Cobalt, Iron, Magnesium, Molybdenum, Tin, Titanium, Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, and Zinc.

Response c: Ohio EPA disagrees that 40 CFR 122.21(g) and 122.21(k) apply to general permits. Also, Ohio EPA would like to note that monitoring and limits for iron are already proposed in the draft permit and no additional monitoring for iron should be required.

Comment d: **Public Notice – We understand that OEPA intends to public notice the general permit, but not NOI applications that are submitted. Members of the public may be interested in surface coal mining activities occurring in the state. We strongly urge OEPA to make the NOI applications available to the public.**

Response d: By rule [Ohio Revised Code 6111.035(A)(2)], Ohio EPA has only 60 days to act on a coal surface mining NOI before the applicant is automatically granted coverage. Public notice rules do not require public notice of NOIs, and with the short timeframe to act on coal surface mining NOIs, it is not feasible to attempt to develop a public notice period. Members of the public can find a list of approved permits online and can request copies of the NOIs.

Comment e4: **Part I.B.1.a and b – the activities are not discharges; we suggest using “mine drainage” and defining the mining area similar to 40 CFR 434.**

Response e4: We will modify the language to, “Discharges associated with activities conducted on the surface of lands...” and “Discharges associated with areas upon which such activities occur...”

The definition of “active mining area” in 40 CFR 434.11(b) does not explicitly include incidental use of adjacent lands or

construction activities related to coal removal. The definition of the mining area in the general permit includes all areas and activities that would be considered “active mining” under SMCRA.

Comment f1: **Part III.A – Flow and precipitation must be measured daily and during discharge and precipitation events.**

Response f1: Ohio EPA agrees that daily flow rate and precipitation monitoring should be required during discharge and precipitation events for active mine sites. Ohio EPA will add the following footnote to the final table to clarify this requirement – “The measuring frequency for total precipitation and flow rate is a minimum requirement; during precipitation events and active discharging events, the permittee should monitor and report these parameters daily.”

However, Ohio EPA disagrees that daily monitoring is required in absence of these events even at active mining sites. Daily monitoring places an unnecessary burden on the facility operators and is not likely to yield any data other than “no discharge.” Sites that are not in the active mining phase may not even have personnel on site every day which will create a logistical burden as well as a financial burden. Once active mining has ceased, the ponds will likely be filled in and there would be no discharge to monitor under any circumstances.

Comment f2: **Part III.A – Please include duration of discharge in the limits and monitoring table.**

Response f2: Ohio EPA does not understand the necessity of this reporting requirement. Per the above modification, facility operators would be required to monitor precipitation and flow rate daily during precipitation and active discharge events. A daily precipitation total and 24-hr total estimate for flow rate should provide adequate data.

Comment f3: **Part III.A – As noted earlier, a WQBEL for TDS and/or conductivity is required. Therefore, the permit should include monitoring requirements for TDS and/or conductivity.**

Response f3: The permit already includes monitoring requirements for both these parameters. The primary table includes monitoring for specific conductivity and total filterable

residue. The alternative tables include specific conductivity monitoring as per the federal effluent guideline limitations. Regarding a WQBEL for TDS, see Response a to Comment a.

Comment i1: **Part III.A Alternative Limits Tables – Regarding alternative effluent limitations, we suggest incorporating the requirement in 40 CFR 434.63(e): the operator shall have the burden of proof that the discharge or increase in discharge was caused by the applicable precipitation event described in paragraphs (a), (b), (c), and (d) of this section.**

Response i1: We will add the following footnote to the alternative tables – “The operator shall have the burden of proof that the discharge or increase in discharge was caused by the applicable precipitation event described in Footnote 2.”

Comment j1: **Part IV – In the stormwater portion of the permit under Drainage, ii, OEPA states as follows: “For each area of the facility that generates storm water discharges with a reasonable potential for containing significant amounts of pollutants that are likely to be present in storm water discharges.” The fact sheet should explain what OEPA means by “a reasonable potential for containing significant amounts of pollutants” and how this situation would be treated.**

Response j1: We will include this information in the fact sheet as requested.

Comment j2: **Part IV – Certain discharges described in Part I.B.1.b...are considered discharges from construction activities listed in 40 CFR 122.26(b)(14)(x) and (b)(15)(i)...The draft general permit includes the effluent limitations guidelines related to soil and erosion control, soil stabilization and dewatering, and subjects all storm water discharges to the guidelines whether the discharge is subject to the guidelines or not.**

When EPA reissued its 2015 Multi-Sector General Permit for Storm Water Discharges from Industrial Activities, it addressed discharges from construction activities for mining Sectors G (metal), H (coal), and J (non-metallic). The MSGP now distinguishes the discharges from land-disturbing activities in the mining context that are

subject to 40 CFR 450 from other storm water discharges from land-disturbing activities...

Therefore, EPA recommends clarifying the permit to include separate parts that address the technology based effluent limits and the requirement to develop a SWPPP.

Response j2:

The description of activities covered by the permit and the storm water language has been significantly changed from the previous version of the permit based on Ohio EPA's discussions with the Ohio Department of Natural Resources – Division of Mineral Resources Management (ODNR-DMRM).

U.S EPA position – mining activities and construction activities are separately defined under the Clean Water Act (CWA); therefore, the draft coal surface affectment general permit should distinguish between the two categories of activities both in definition and in the implementation of federal regulations. Coal mining activities are regulated in Chapter 40 of the Code of Federal Regulations (CFR), Part 434. Construction activities are listed in 40 CFR 122.26(b)(14)(x) and (b)(15)(i) and regulated in 40 CFR 450. U.S. EPA commented that the construction activities in the general permit should be regulated by the New Source Performance Standards (NSPS) in 40 CFR 450 and the industrial storm water Multi-Sector General Permit (MSGP) for mining Sector H (coal) should be used as a guide.

Citations -

1) 40 CFR 434.11(b) - The term “active mining area” means the area, on and beneath land, used or disturbed in activity related to the extraction, removal, or recovery of coal from its natural deposits. This term excludes coal preparation plants, coal preparation plant associated areas and post-mining areas.

2) 40 CFR 450.23 – This section describes the NSPS for technology-based effluent limitations (TBELs) for construction activities. This section refers to 40 CFR 450.22 and 40 CFR 450.21 for specific standards. None of these sections contain effluent limitations.

3) 122.26(b)(14)(x) and 122.26(b)(15)(i) –These sections define “construction activity” as: including clearing, grading

and excavation. These sections also define the threshold for a “small” construction site versus a large site.

4) MSGP

a) Covers discharges from “earth-disturbing activities conducted prior to active mining activities.” Does NOT authorize storm water discharges subject to an existing effluent limitation guideline at 40 CFR 434 (8.H.2.2).

Earth-disturbing activities conducted prior to active mining activities are listed in 8.H.3.2.

b) 8.H.3.3, active mining activities – Activities related to the extraction, removal or recovery, and preparation of coal; removal of overburden and waste rock to expose mineable minerals; and site reclamation and closure activities. All such activities occur within the “active mining area.”

c) 8.H.3.4, active mining area - A place where work or other activity related to the extraction, removal or recovery of coal is being conducted, except, with respect to surface mines, any area of land on or in which grading has been completed to return the earth to desired contour and reclamation work has begun.

d) 8.H.8 contains benchmarks for total aluminum, total iron, and total suspended solids but no effluent limitations.

Summary – The draft general permit subjects all storm water discharges to the effluent limitation guidelines whether, per the CWA, the discharge is subject to those guidelines or not. Storm water discharges generated by construction activities (as defined by the CWA) should be handled separately in the draft permit from discharges generated by mining activities (as defined by the CWA).

Ohio EPA Position – The Surface Mining Control and Reclamation Act (SMCRA) does not distinguish between construction activities and mining activities. SMCRA also requires that all mining be performed in accordance with the effluent guidelines in 40 CFR 434. Under SMCRA, there is no distinction between discharges from land-disturbing activities in the mining context and other storm water discharges from land-disturbing activities. Also under SMCRA, all mining discharges must have effluent limitations. The storm water language is meant to cover all potential discharges during all stages of mining, which, according to SMCRA, is all activity on a mine site or adjacent area related

to mining. There is no point in the mining process that the operator would not have to abide by the storm water plan contained in the approved SMCRA permit. Therefore, in order for the general permit to be compliant with both SMCRA and CWA, *all* activities should be considered mining activities. Storm water controls in the SMCRA permit are at least as stringent if not more so than the controls in 40 CFR 450 or the MSGP.

Citations -

1) SMCRA authority is under the Office of Surface Mining Reclamation and Enforcement (within the Department of the Interior) - 30 CFR 700-899. Surface coal mining is specifically Subchapter G, parts 772-785.

2) 30 CFR 700.5 (Definitions) – This section defines “surface coal mining operations” and includes a list of activities. If these activities are performed on any adjacent land the use of which is incident to any such activities, then those activities are also considered to be “surface coal mining operations.”

3) 30 CFR 773.4(a), Requirements to obtain permits – Any surface coal mining operations require a permit issued by the regulatory authority.

4) 30 CFR 780.21(j), Surface-water monitoring plan – The application shall include a surface-water monitoring plan. The plan must include the effluent limitations found at 40 CFR 434. For point-source discharges, monitoring shall be conducted in accordance with 40 CFR parts 122, 123 and 434 and as required by the NPDES permitting authority.

5) References to SMCRA in the MGSP –

a) Part 8, Subpart H, second paragraph - "Where compliance with a requirement in a separate exploration permit, mining permit, reclamation plan, Surface Mining Control and Reclamation Act (SMCRA) requirements, etc. will result in you fully meeting any requirement in this Subpart, you are considered to have complied with the relevant requirement in this Subpart. You must include documentation in your SWPPP describing your rationale for concluding that any particular action on your part is sufficient to comply with the corresponding requirement in this Subpart."

b) 8.H.6.1, Other Applicable Regulations - "...All SMCRA requirements regarding control of stormwater-related pollutant discharges must be addressed and then documented with the SWPPP (directly or by reference)."

Ohio EPA Response Summary -

1) Broadening the scope of activities - A company cannot commence any "surface coal mining operations" as defined by SMCRA without first having a SMCRA permit. SMCRA requires a surface-water monitoring plan as part of the permit. Any surface coal mining operations take place with an approved permit, therefore, any surface coal mining operations must include the effluent guideline limitations in 40 CFR 434. As Ohio EPA is the NPDES permitting authority, the NPDES permit, not the SMCRA permit, contains the effluent guidelines in 40 CFR 434. The construction guidelines from 40 CFR 450 and section 8.H of the MSGP do not include the effluent guidelines from 40 CFR 434. Excluding the construction activities as defined by the CWA from the NPDES permit will exclude surface coal mining operations as defined by SMCRA from having the effluent guideline limitations in 40 CFR 434 which are required by SMCRA. If the NPDES permit does not apply the effluent guidelines from 40 CFR 434 to all activities defined as "surface coal mining operations" under SMCRA, the permittee will be out of compliance with SMCRA.

Therefore, the NPDES permit should apply the effluent guidelines to activities defined as "construction" by the CWA but defined as "surface coal mining operations" in SMCRA in order to ensure permittees are compliant with both SMCRA and the CWA.

2) Storm water requirements - Section 8.H of the MSGP states that if compliance with SMCRA meets the compliance in 8.H, then the permittee is considered in compliance with 8.H. Ohio EPA's position is that the storm water control requirements in SMCRA are as stringent or more stringent than those in a construction general permit or the MSGP.

September 30, 2015 Comments:

Comment d: **Part III.A – Selenium is known to be present in coal mining related discharges. To fill the data gap regarding the presence of selenium in discharges that would be**

subject to the draft general permit, please add selenium monitoring to the requirements, and indicating that the method detection limits need to be no higher than 2 µg/L.

Response d: Ohio EPA does have some limited data on selenium in coal mining discharges from individual permits. This data indicates selenium is not generally present in the discharges. Selenium causes skeletal deformities in fish; this has not been observed downstream of coal mining operations.

Comment f: Part IV.C.4 – Section 308(b) of the CWA does not include a provision that allows for the assessment of a reasonable fee for copying records. Consequently, please delete the third sentence from this subpart. In addition, the regulations at 40 CFR 2, Subpart B do not include “facility security measures” as confidential business information per se. Nor are we aware of any class determination that has been made for such information. Therefore, please revise the final sentence as follows: “The permittee may claim any portion of the storm water prevention plan as confidential in accordance with 40 CFR Part 2, including any portion of the plan describing facility security measures.

Response f: We will modify the permit as requested.

Agency Contact for this Project

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